

Biotin-16-UTP (10mM)

B744152

Store at -20°C

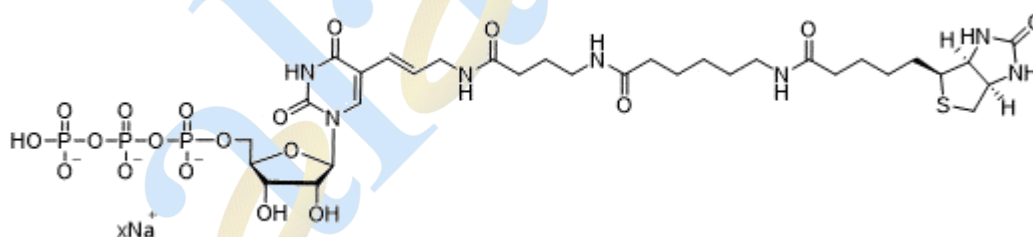
Introduction:

To label RNA with Biotin, Biotin-16-UTP can replace UTP in most cases as a substrate for various RNA synthesizing enzymes, modifying enzymes, polymerases, such as T3, T7, and SP6 RNA polymerases. RNA probes labeled with biotin can substitute for radioactively labeled RNA probes in many applications including in situ hybridization and chromosome mapping. Biotinylated probes can be detected using various methods based on the strong binding of biotin to streptavidin, such as direct detection of labeled RNA using fluorescently labeled streptavidin or indirect detection of labeled RNA using streptavidin conjugated with HRP, alkaline phosphatase, or antibodies.

Structural features:

- Biotin: A small molecule vitamin that has an affinity with avidin or streptavidin.
- 16-carbon chain (e.g., 16-aminocaproic acid linker): a long, flexible chain that is used for joining Biotin and UTP, which help reduce steric hindrance and improve binding efficiency.
- Uridine triphosphate (UTP): A nucleoside triphosphate that is an important precursor during RNA synthesis.

Structure:



Matters needing attention:

1. This product is for R&D only. Not for drug, household, or other uses.
2. For your safety and health, please wear a lab coat and disposable gloves during the operation.